

Diabetes in Idaho

Results from the 2006 Behavioral Risk Factor Surveillance System

CONTENTS

Health Districts and Counties in Idaho 2

DIABETES PREVALENCE and MORTALITY

Adults in Idaho with diabetes 3

Adults in Idaho with pre-diabetes 4

Gender comparison 5

Mortality 6

SELF-MANAGEMENT OF DIABETES

Blood sugar checks 7

A1C checks 8

Flu and pneumonia vaccinations 9

Foot exams 10

Dilated eye exams 11

Dental exams 12

Diabetes medications 13

Weight management 14

Physical activity 15

Physical and mental health 16

Diabetes self-management classes 17

COMPLICATIONS OF DIABETES: HEART DISEASE AND STROKE

Smoking among Idaho adults with diabetes 18

Risk for heart disease, heart attack and stroke among Idaho adults with diabetes 19

High blood pressure among Idaho adults with diabetes 20

High cholesterol among Idaho adults with diabetes 21

End-stage renal disease among Idaho adults with diabetes 22

A Guide to Diabetes Screenings and Exams 23

Diabetes Education Centers in Idaho 24

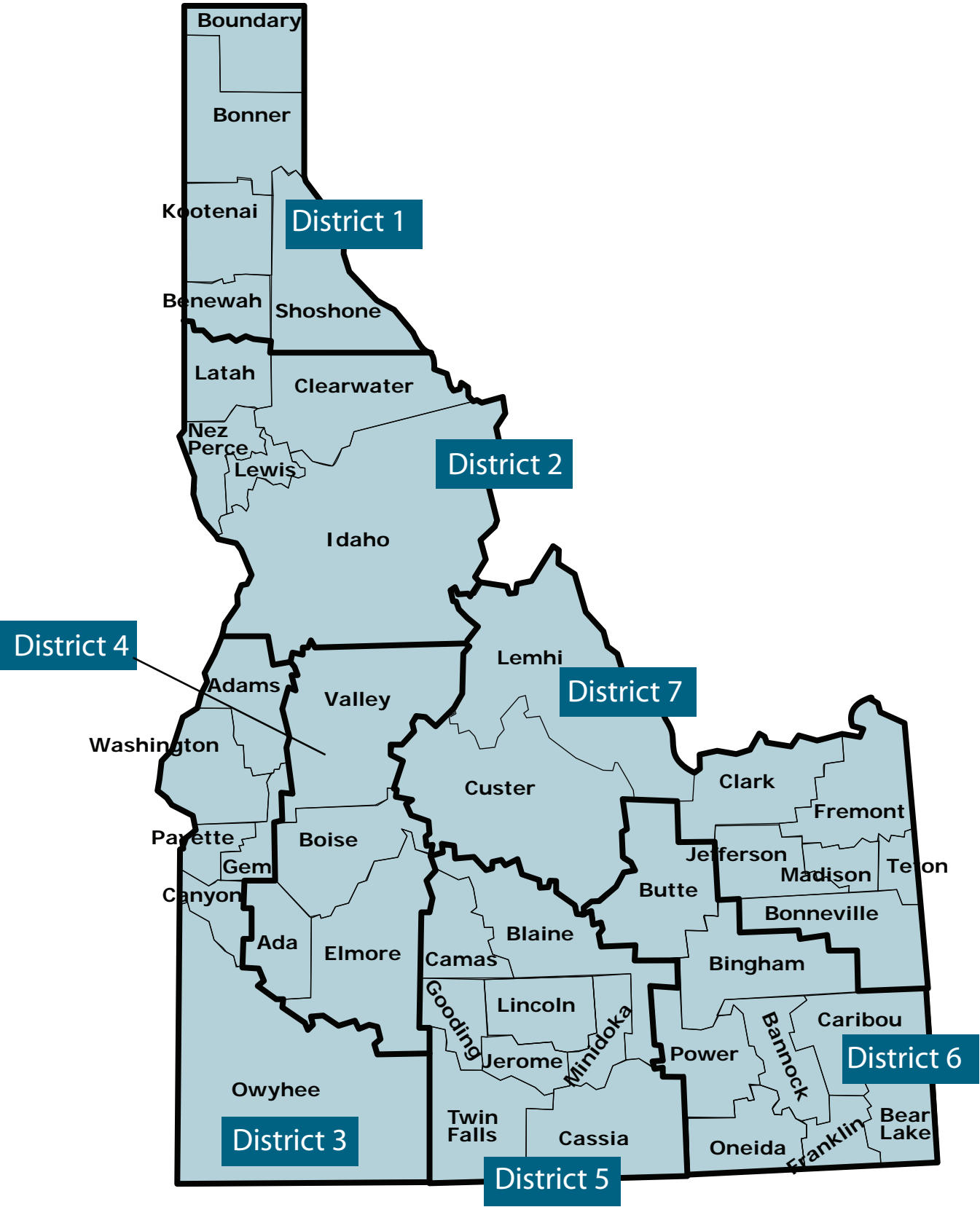
Call (208) 334-5977 to request a complete 2006 BRFSS report or send your request to:

Health Statistics Unit
Idaho Bureau of Health Policy and Vital Statistics
450 West State Street, 1st Floor
P.O. Box 83720
Boise, ID 83720-0036



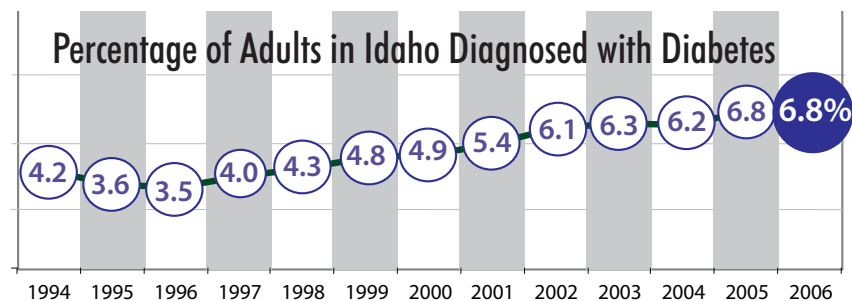
IDAHO DEPARTMENT OF
HEALTH & WELFARE

Health Districts and Counties in Idaho



How many adults in Idaho have diabetes?

Approximately 72,000, or 6.8 percent of Idaho adults, 18 years or older, report ever being told by a doctor that they have diabetes (not including gestational diabetes). Most Idahoans are diagnosed at the age of 51.

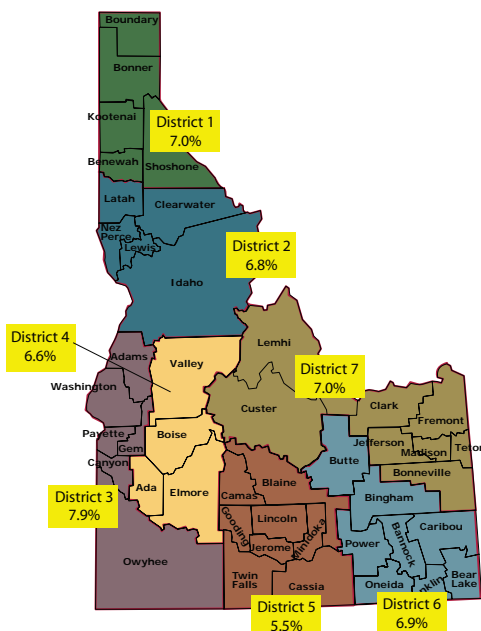


If you're a health care provider:

- Involve your patients in setting self-management goals. Follow up and monitor your patients' diabetes self-management goals.
- Get training and train your staff on how to help patients with their self-management goals.
- Encourage your patients with diabetes to use diabetes support groups and community resources to help them achieve their self-management goals.
- Refer your patients to an American Diabetes Association-recognized diabetes education program. [For a list of programs, click here \(page 24\).](#) Community health clinics in Idaho also have staff who can provide diabetes education to local residents. Many people with diabetes manage their disease better if they receive education and training.
- Apply the Chronic Care Model to your practice. For an excellent resource on how to apply the Chronic Care Model with your patients with diabetes, go to the Institute for Health Care Improvement website at: <http://www.ihc.org/IHI/Topics/ChronicConditions/Diabetes>.

How is your Health District doing?

Percentage of adults with diabetes



Prevalence of Diabetes Among People Aged 20 Years or Older, United States, 2005

- Age 20 years or older: 20.6 million; 9.6 percent of all people in this age group have diabetes.
- Age 60 years or older: 10.3 million; 20.9 percent of all people in this age group have diabetes.
- Men: 10.9 million; 10.5 percent of all men aged 20 years or older have diabetes.
- Women: 9.7 million; 8.8 percent of all women aged 20 years or older have diabetes.

from the National Institute of Diabetes and Digestive and Kidney Diseases, NIDDK, NIH. Available at: <http://diabetes.niddk.nih.gov/dm/pubs/statistics/index.htm>

Are Idaho adults suffering from pre-diabetes?

In 2006, approximately **80,000, or 8.0 percent of Idaho adults, 18 years or older**, reported ever being told by a doctor that they have **pre-diabetes**.¹

What is Pre-Diabetes?

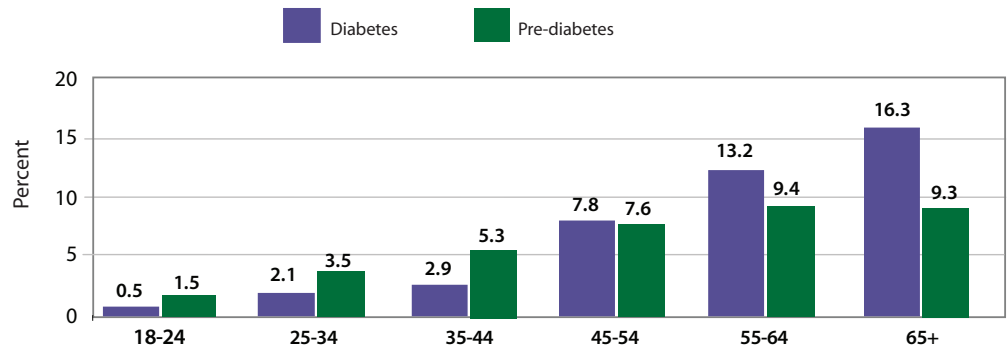
Pre-diabetes is a condition of higher than normal blood glucose levels—not high enough to be diagnosed as diabetes, but in the abnormal range. Hyperglycemia not sufficient to meet a diagnosis of diabetes is categorized as either impaired fasting glucose (IFG) or impaired glucose tolerance (IGT). IFG and IGT have been officially termed “pre-diabetes.”² Both are risk factors for future diabetes and cardiovascular disease.

IFG = fasting plasma glucose (FPG) of 100 mg/dl - 125 mg/dl

IGT = 2-hour plasma glucose of 140 mg/dl - 199 mg/dl

The FPG is the preferred test for diagnosing pre-diabetes and diabetes.² It measures blood glucose levels after a fast of at least 8 hours.

Percentage of Adults with Diagnosed Diabetes and Pre-Diabetes by Age



If you're a health care provider:

Screen for Pre-Diabetes and Diabetes¹

- Patients with a BMI > 25 should be screened at 3-year intervals beginning at age 45. Testing should be considered at an earlier age or be done more frequently in people who are overweight if they have other diabetes risk factors.
- Patients who have symptoms of marked high blood sugar, including frequent urination, excessive thirst, weight loss, and blurred vision should undergo diagnostic testing for diabetes.
- Ultimately, the decision to test for diabetes should be based on clinical judgment and patient preference.

Help Prevent or Delay Type 2 Diabetes

- Counsel your patients who have IGT and IFG that modest weight loss and regular physical activity are key to preventing or delaying type 2 diabetes. Follow-up counseling has been shown to be important for success.²
- Every 1-2 years, monitor patients with pre-diabetes for development of diabetes.³
- Give close attention to, and provide treatment for, other CVD risk factors such as tobacco use, hypertension and dyslipidemia.

1. Clinical Practice Recommendations 2007. American Diabetes Association. *Diabetes Care*. 2007;30:S1-S96.

2. The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. The Diabetes Control and Complications Trial Research Group *NEJM*. 1993;329(14):977-986.

3. Screening for type 2 diabetes. Position Paper. American Diabetes Association. *Diabetes Care*. 2004;27:S11-S14.

Who gets diabetes in Idaho most often—men or women? At what age are most Idahoans diagnosed?

Both men and women in Idaho get diabetes at an almost equal rate. The age group most affected by diabetes is adults 65 and older. Most adults who get diabetes are diagnosed with the disease at an average age of 51.

Diabetes by Age and Gender



About 1 in 5 Idaho adults age 65 and over have diabetes



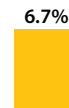
About 1 in 10 Idaho adults age 55-64 have diabetes



About 1 in 12 Idaho adults age 45-54 have diabetes



Men



Women

If you're a health care provider:

The American Diabetes Association believes there is enough evidence to justify screening for diabetes in individuals at high risk.* Risk factors for type 2 diabetes include:

- A family history of diabetes.
- Age over 45. The chance of getting type 2 diabetes increases with age.
- Race or ethnic background. The risk of type 2 diabetes is greater in Hispanics, blacks, Native Americans and Asians.
- Metabolic syndrome (also called insulin resistance syndrome).
- Being overweight. If you are overweight, defined as a body mass index (BMI) greater than 25, you're at higher risk of type 2 diabetes.
- High blood pressure.
- Abnormal cholesterol levels. HDL ("good") cholesterol levels under 35 mg/dL (milligrams per deciliter) and/or a triglyceride level over 250 mg/dL increases your risk of type 2 diabetes.
- History of gestational diabetes. Getting diabetes during pregnancy or delivering a baby over nine pounds can increase your risk of type 2 diabetes.

*Position Statement: Screening for Diabetes.
American Diabetes Association. *Diabetes Care*.
2002;25:S21-S24.

Idaho adults age 65 and older are significantly more likely to suffer from diabetes than those 55 and younger.

Are Idaho adults dying from diabetes?

Diabetes continues to take its toll in Idaho—in mortality, in complications and the costs associated with both. Coordinated, comprehensive care, delivered by multiple health care professionals is vital and has proved to be effective in helping people with diabetes manage their disease.

Age Group	Diabetes as Primary Cause of Death	Diabetes-Related Deaths ²
	Three-Year Average Annual Age-Specific Death Rate per 100,000	Three-Year Average Annual Age-Specific Death Rate per 100,000*
45-54	14.1	27.4
55-64	24.4	60.4
65-74	84.7	206.5
75-84	197.1	507.9
85+	354.4	922.4

Note: Only records for Idaho residents in which the death occurred in Idaho were reviewed for diabetes contributing to the death. Approximately 5.6 percent of death records are from out of state and the diabetes-related death rate is likely to be somewhat below actual.

* Diabetes-related deaths include Idaho resident deaths occurring in Idaho and out of state in which the underlying cause of death was diabetes, plus all other deaths to Idahoans who died in Idaho in which diabetes was listed anywhere in the cause-of-death section.

Literal information for out-of-state deaths are not reported on the death certificates provided to the Bureau of Health Policy and Vital Statistics. Therefore, numbers and rates are underreported for diabetes-related deaths that occur out of state.

Gender	Three-Year Average Annual Age-Adjusted Death Rate per 100,000	Three-Year Average Annual Age-Adjusted Death Rate per 100,000*
Male	29.7	71.3
Female	22.0	54.1
Race		
White	24.6	60.7
Race other than white	64.6	123.9
American Indian	105.6	171.4
Ethnicity		
Non-Hispanic	25.0	61.3
Hispanic	36.6	80.9

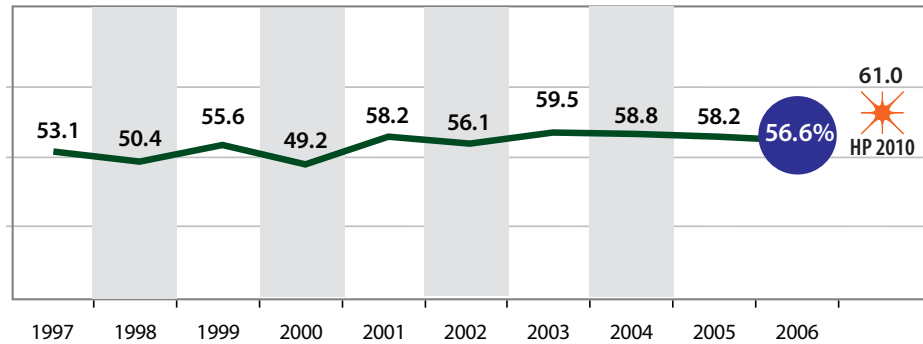
Source: Idaho Department of Health and Welfare, Bureau of Health Policy and Vital Statistics (June 2007).

Do Idaho adults with diabetes monitor their blood sugar daily?

Idaho continues to fall short of meeting the Healthy People 2010 goal of having 61% of adults with diabetes monitor their blood sugar daily.

Better blood sugar control increases the quality of life of people with diabetes and results in cost savings for health care organizations.

Percentage of Adults with Diabetes Checking Blood Sugar Daily



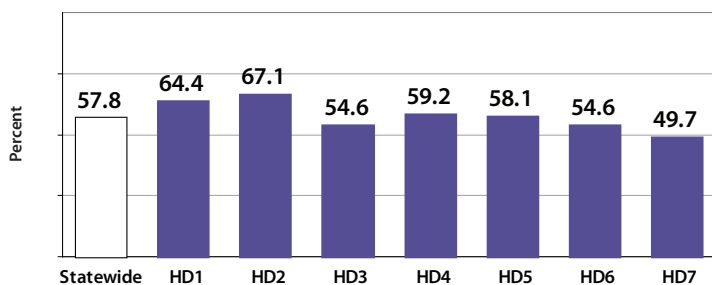
If you're a health care provider:

- Encourage all your patients with diabetes to monitor their blood sugar levels daily.
- Tell your patients when to check their blood sugar and make sure they know their blood sugar goals.
- Ask your patients what their numbers are when they come to see you. Those numbers can be useful in preventing hypoglycemia, reaching treatment goals, adjusting medications, and determining physical activity and nutrition needs.
- Remind your patients that how they feel is not an accurate indication of what their blood sugar level is. Patients can't always feel the highs and the lows, so testing is essential!

In 2006, only a little more than half of Idaho adults with diabetes checked their blood sugar levels daily.

How is your own Health District doing?

2004-2006 Aggregate

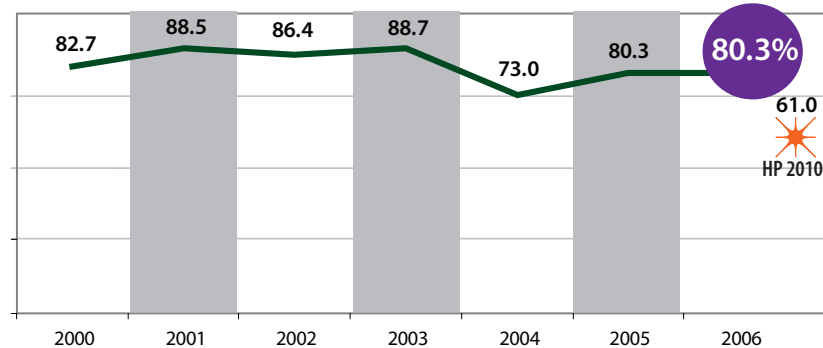


Are Idaho adults with diabetes getting regular A1C checks?

In 2006, 80.3% of Idahoans with diabetes were getting their twice a year A1C check.

The A1C number shows the average amount of sugar in a person's blood over the last two to three months. The A1C level gives you an idea whether the patient's treatment plan is working. It's the most effective way to know what a patient's overall blood sugar control has been like.

Percentage of Adults with Diabetes Getting Regular A1C Checks



If you're a physician:

You should be prescribing regular A1C tests for your patients with diabetes and sharing those results with them. Lowering the A1C level has been shown to reduce microvascular and neuropathic complications of diabetes and possibly macrovascular disease.*

If you're another health care provider:

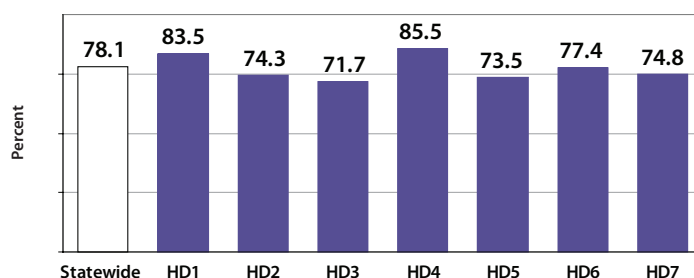
Ask your patients if they're getting regular A1C checks, and, if they aren't, explain why it's an important and useful number. Then encourage them to make it a routine check.

*Tight blood pressure control and risk of macrovascular and microvascular complications in type 2 diabetes: UKPDS 38. UK Prospective Diabetes Study Group. *BMJ*. 1998;317:703-713.

Idaho has always done better than the Healthy People 2010 goal for getting twice a year A1C checks. The Healthy People 2010 goal is 61%.

How is your own Health District doing?

2004 - 2006 Aggregate

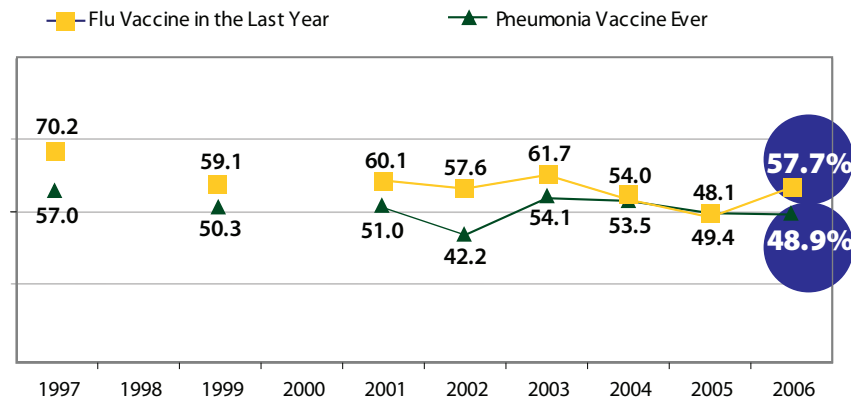


Are Idaho adults with diabetes getting regular flu and pneumonia vaccinations?

In 2006, Idaho saw an increase in the percentage of Idaho adults with diabetes who had received a flu shot in the last year.

The percentage of Idaho adults with diabetes getting the required pneumonia vaccine declined from a high of 57.0% in 1997 to a low of 48.9% in 2006.

Percentage of Adults with Diabetes Getting Regular Flu and Pneumonia Vaccinations

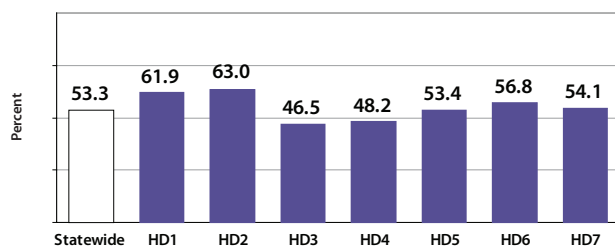


If you're a health care provider:

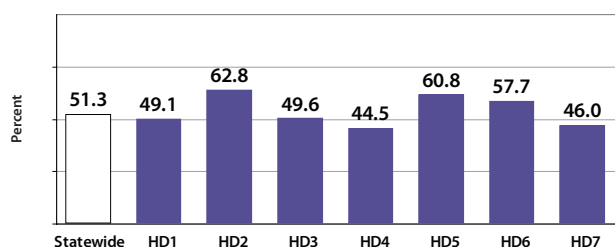
- Ask your patients if they've gotten their flu and pneumonia shots. If they haven't, provide one or help them make an appointment today.
- Tell your patients with diabetes that being sick by itself can raise blood glucose. Illness can prevent them from eating properly, which further affects blood glucose.

How is your Health District doing? 2004-2006 Aggregate

Percentage of adults who had an annual flu shot



Percentage of adults who had a pneumonia shot ever

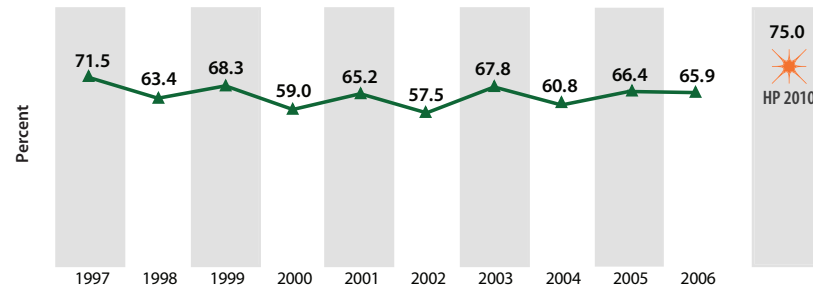


In 2006, a little more than half of Idaho adults with diabetes had gotten a flu shot; a little less than half had gotten a pneumonia shot.

Are Idaho adults with diabetes getting an annual foot check from their doctors?

In 2005, 66.4% of people with diabetes reported having their doctor perform a yearly foot check. The Healthy People 2010 goal is 75%.

Percentage of Adults with Diabetes Getting Annual Foot Checks



If you're a health care provider:

Ask your patients with diabetes if they're getting regular foot checks and talk to them about the importance of good foot care and what loss of protective sensation can mean. A physician or other trained health care provider should:

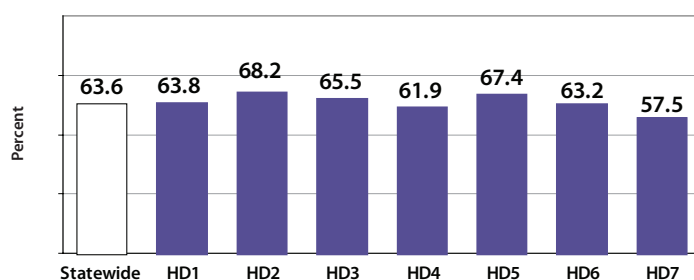
- Assess skin, hair and nails, musculoskeletal structure, vascular status, and protective sensation.
- Inspect footwear for blood or other discharge, abnormal wear patterns, foreign objects, proper fit, appropriate material, and foot protection.
- Educate about self-care of the feet.
- Educate about the importance of blood glucose monitoring including the use of the Hemoglobin A1c test.
- Reassess metabolic control.

If you're a dentist, dental hygienist or eye specialist, a reminder for other diabetes checkups is part of good diabetes management. Your patients trust you already, so your health care reminders should be well-accepted by them.

How is your own Health District doing?

2004-2006 Aggregate

Percentage of People Getting Foot Exams



Idaho continues to fall below the Healthy People 2010 goal for getting foot exams.

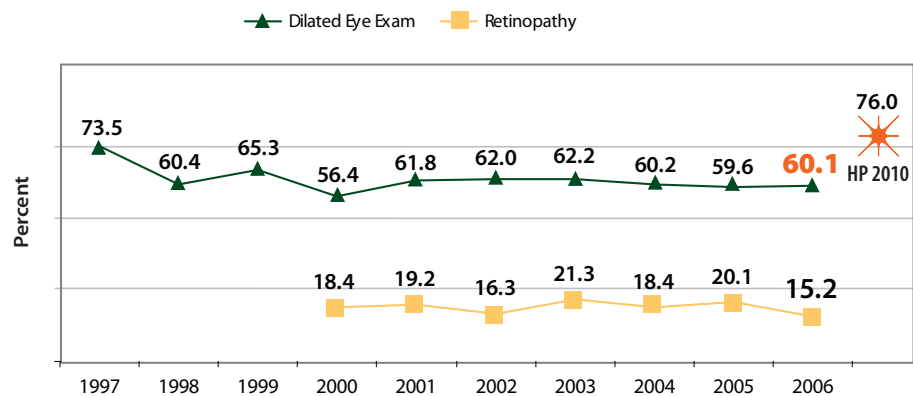
Are Idaho adults with diabetes getting yearly dilated eye exams?

The Healthy People 2010 goal is for 76% of people with diabetes to get a yearly dilated eye exam, during which drops are placed in the eye to check for signs of retinopathy.

Diabetic retinopathy is one of the leading causes of blindness among the working age population. People with diabetes are also at increased risk for cataracts and glaucoma. The longer a person has had diabetes, the more likely they are to have retinopathy.

In 2006, 15.2% of Idaho adults with diabetes had been diagnosed with retinopathy, which was a decline from 20.1% in 2005.

Percentage of Adults with Diabetes Getting Yearly Dilated Eye Exams



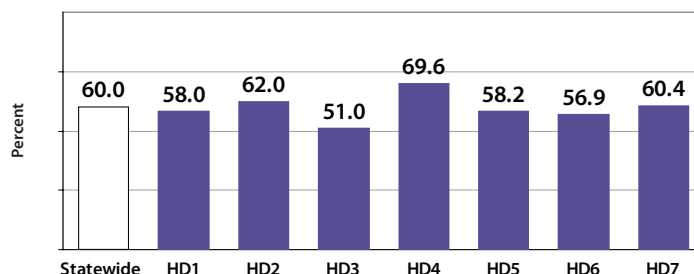
If you're a health care provider:

- Tell your patients with diabetes that keeping their blood sugar levels close to normal means they're less likely to have retinopathy, or they may experience milder forms.
- Refer your patients to an ophthalmologist or optometrist for regular dilated eye exams, because early detection and treatment is critical to reduce the risk of severe vision loss.
- If you're an eye care specialist, ask your patients if they've been diagnosed with diabetes. They may not realize it's important to tell other health care providers about their diabetes.

In 2006, only 60% of Idahoans with diabetes got the recommended annual dilated eye exam.

How is your own Health District doing? 2004-2006 Aggregate

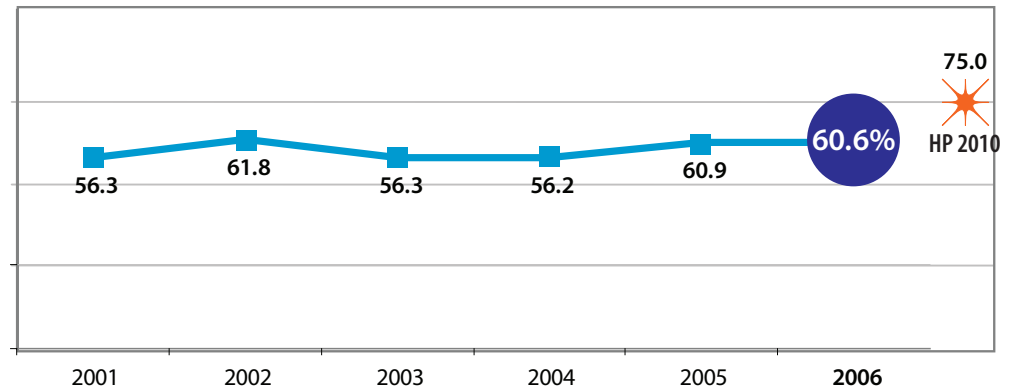
Percentage of People Getting Eye Exams



Are Idaho adults with diabetes seeing their dentists regularly?

In 2006, 60.6% of Idaho adults with diabetes had a dental visit in the last year—in line with the trend since 2001.

Percentage of Adults with Diabetes Seeing Their Dentist Regularly



If you're a health care provider:

- Encourage your patients to monitor their blood sugar daily. Poor blood sugar control has been linked to periodontal disease. Preliminary evidence has also shown that inflammation of the gums can result in cardiovascular disease because of the inflammatory process involved.
- If you're a dental professional, you may need to be more aggressive in your management of patients with diabetes and encourage them to come in for more frequent checkups. Your staff may benefit from extra training to understand the needs of your patients with diabetes.
- During their dental visits, you can also play a crucial role in reminding your patients with diabetes to get the other recommended diabetes exams and screenings, such as foot exams and A1C checks. [\[Click here to learn more about these exams.\]](#)

Idaho adults with diabetes were less likely to have seen a dentist in the last year than adults without diabetes.

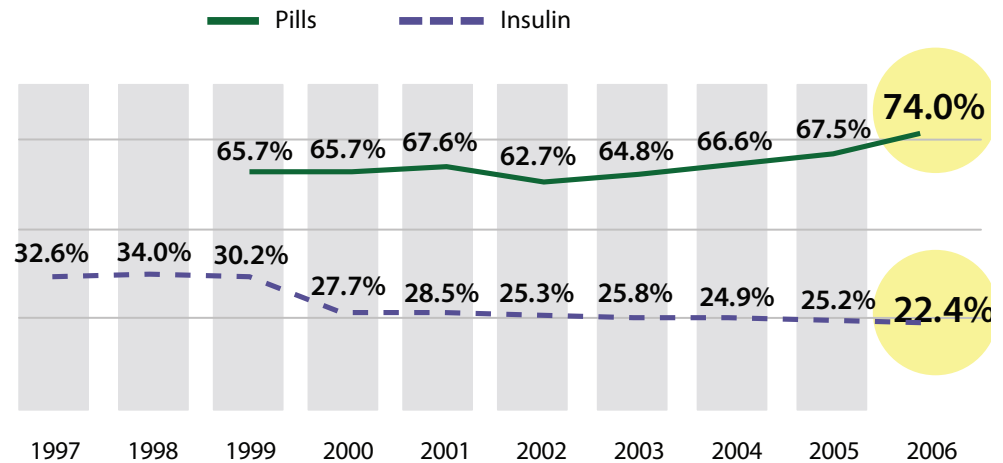
Are Idaho adults with diabetes taking diabetes medications to manage their diabetes?

In 2006, almost three-fourths (74.0%) of Idaho adults with diabetes took oral medication. Less than one-fourth (22.4%) took insulin.

Treatment for type 2 diabetes is determined by a physician based on a patient's age, overall health, and medical history, extent of the disease, tolerance for specific medications, procedures, or therapies, expectations for the course of the disease, and the patient's preference. The goal of treatment is to keep blood sugar levels as close to normal as possible.

Sometimes, type 2 diabetes can be controlled through losing weight, improved nutrition and exercise alone. But these measures may not be enough for some people and either oral medications and/or insulin must be used. When oral medications are no longer effective, insulin may be required.

Percentage of Adults with Diabetes Taking Insulin or Pills



If you're a health care provider:

There are a variety of reasons people with diabetes may be resistant to using insulin. To determine a patient's concerns, ask questions such as:

- What do you need to know about using insulin to control your diabetes?
- What problems do you think you'll have by using insulin?
- What is your biggest concern about using insulin? What would be the biggest benefit for you?
- Are you willing to try insulin? If not, what would help you to consider using insulin?

Certified Diabetes Educators (CDEs) can be powerful allies in helping patients make the decision to initiate insulin therapy and in managing their insulin dosage. Recent changes in Medicare, Medicaid, and other insurance packages have greatly increased the likelihood of reimbursement for these essential services.

[Click here to find a diabetes education center near you.](#)

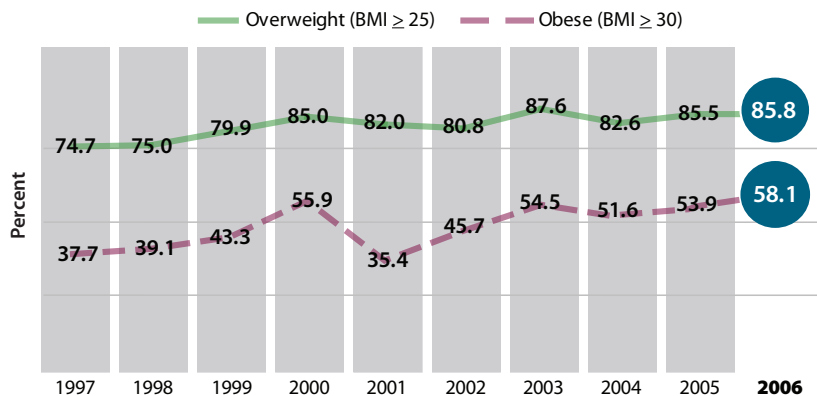
Are Idaho adults with diabetes maintaining a healthy weight?

In 2006, eight in ten adults with diabetes were overweight (85.8%) and one in two adults with diabetes were obese (58.1%).

Overweight = Body Mass Index (BMI) of greater than or equal to 25.

Obese = Body Mass Index (BMI) of greater than or equal to 30.

Percentage of Adults with Diabetes Who Are Overweight and Obese



If you're a health care provider:

- Research shows that 90% of adults can prevent weight gain by increasing daily physical activity by just 2,000 steps and eating 100 fewer calories.¹ A weight loss of as little as 5 to 7% is linked to a 58% reduced risk of diabetes because it helps reduce insulin levels.²

1. Hill JO, Wyatt H, et al. *Science*, vol 299: February 7, 2003.

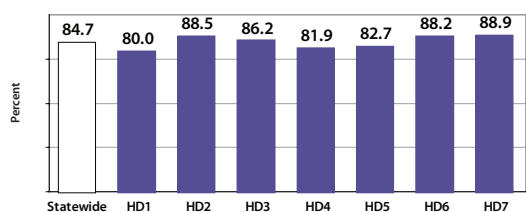
2. Diabetes Prevention Research Group (2002) Reduction in the evidence of type 2 diabetes with life-style intervention in type 2 diabetes or metformin. *NEJM*. 2002;346:393-403.

- Talk to your patients about their weight. Make sure the focus is on their getting regular activity and sticking to a healthy eating plan.

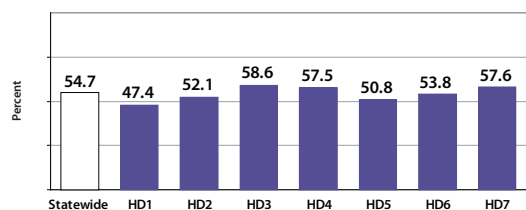
How is your own Health District doing?

2004-2006 Aggregate

Percentage of adults with diabetes who are overweight



Percentage of adults with diabetes who are obese

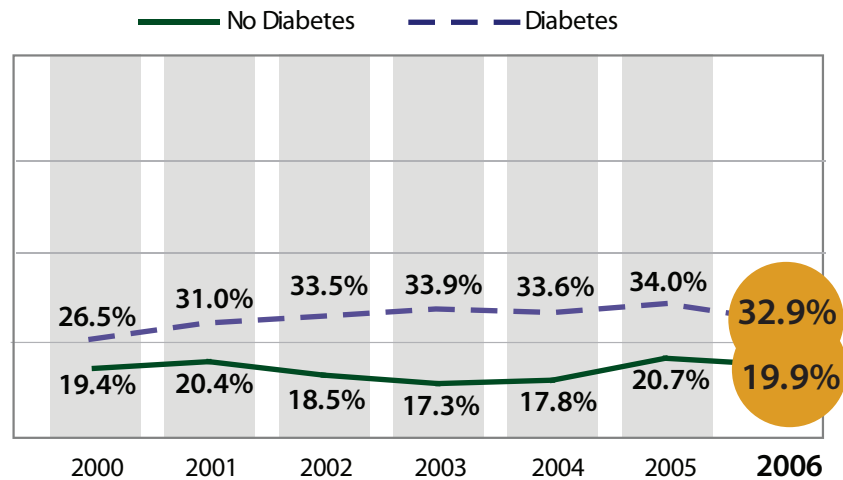


Eight in ten Idaho adults with diabetes are overweight. One in two adults with diabetes are obese.

Do Idaho adults with diabetes take part in leisure time physical activity?

Regardless of the year, people with diabetes were less likely than people without diabetes to do physical activity in their leisure time.

Not Participating in Leisure Time Physical Activity



If you're a health care provider:

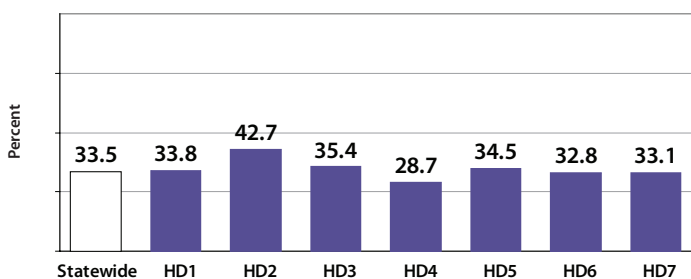
Find out what's holding your patients back from exercising. Some patients think exercising means jogging 5 miles a day, but it can be as simple as taking the stairs at work and walking at lunchtime everyday for 30 minutes. Small steps = big changes!

In 2006, Idaho adults with diabetes were much more likely than adults without diabetes to have not participated in leisure time physical activity.

How is your own Health District doing?

2004-2006 Aggregate

Percentage of People with Diabetes Not Participating in Leisure Time Physical Activity

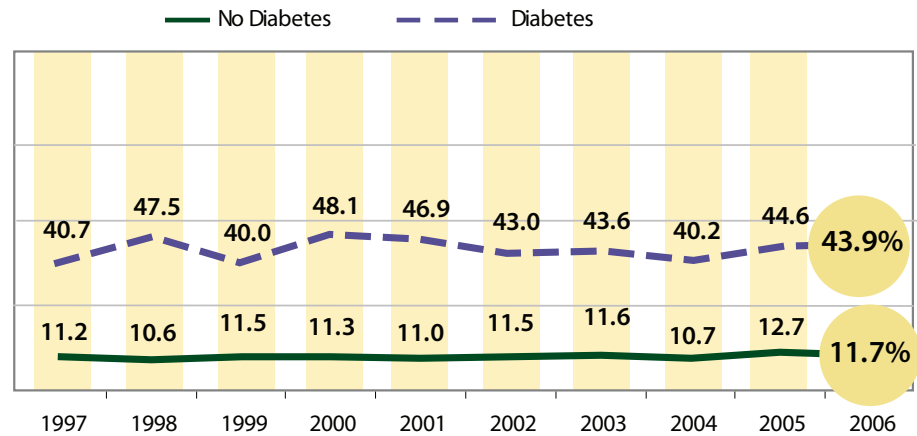


Do Idaho adults with diabetes say that they feel physically and mentally healthy?

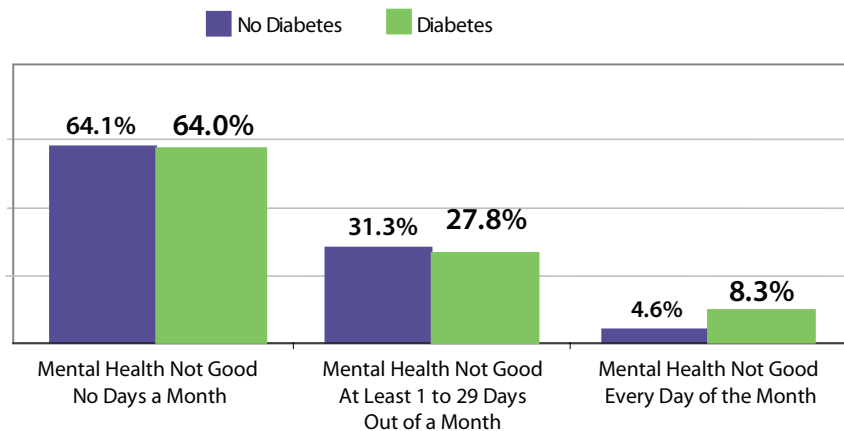
Regardless of year, Idaho adults with diabetes were twice as likely to report 'poor' or 'fair' general health compared to Idaho adults without diabetes.

Idaho adults with diabetes were more likely to report that their mental health was not good all days of the month (8.3%) compared to those without diabetes (4.6%).

Say That They Have Poor or Fair General Health



Say That Their Mental Health Isn't Good



If you're a health care provider:

The struggle of coping with diabetes can lead to depression in many people with diabetes. And this depression can get in the way of dieting, exercising, and even taking the medicines that control diabetes. Screen your patients with diabetes for depression and then start them on a treatment plan to address this serious problem—it could save their lives.*

*One commonly used tool for primary care practitioners is the PHQ-9, a nine item depression scale of the Patient Health Questionnaire. This questionnaire is a powerful tool for assisting primary care clinicians in diagnosing depression as well as selecting and monitoring treatment. (From the Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PRIME-MD PHQ)). The PHQ was developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues. To download a copy, go to www.pfizer.com/phq-9/phq-9.pdf.

Do Idaho adults with diabetes benefit by taking diabetes self-management classes?

More than half of Idaho adults with diabetes took an American Diabetes Association recognized diabetes management class taught by Certified Diabetes Educators in 2006. Diabetes self-management training helps people learn how to control their blood sugar, make healthy food choices, manage their sick days, and prevent problems like blindness, amputations and stroke.

Medicare covers diabetes education, and many other insurers provide some level of coverage. [Click here to find an approved diabetes education center near you.](#)

Effect of Diabetes Self-Management Education on Diabetes Self-Care

	Among Those Having Taken a Class	Among Those Not Having Taken a Class
Test Blood Sugar Daily	62.9%	46.5%
Get an Annual A1C Test	86.0%	70.7%
Do Personal Foot Checks Daily	70.0%	46.0%
Get an Annual Dilated Eye Exam	60.7%	59.1%
Get an Annual Flu Vaccine	62.0%	50.9%
Had a Pneumonia Vaccine Ever	56.4%	42.8%

If you’re a health care provider:

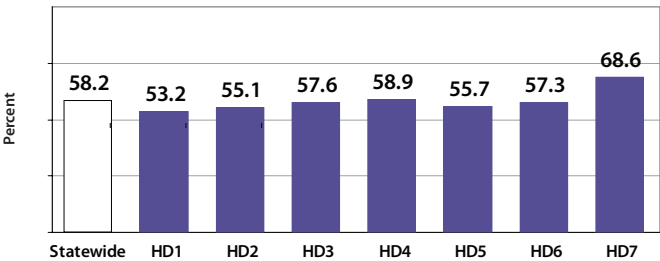
Primary care physicians and other health care providers do an excellent job instructing their patients with diabetes in self-management skills. But some patients need and benefit from longer, group sessions over a period of time. Encourage your patients with diabetes to enroll in diabetes self-management classes. Your patients will learn to control their blood sugar better, leading to fewer complications and better outcomes. This will help make appointments with your patients more satisfying and rewarding for you both.

People with type 2 diabetes who participate in group diabetes education programs show measurable improvement and require less medication. They also may reduce their blood pressure and body weight.*

How is your own Health District doing?

2004-2006 Aggregate

Percentage of People with Diabetes Who Took Self-Management Classes

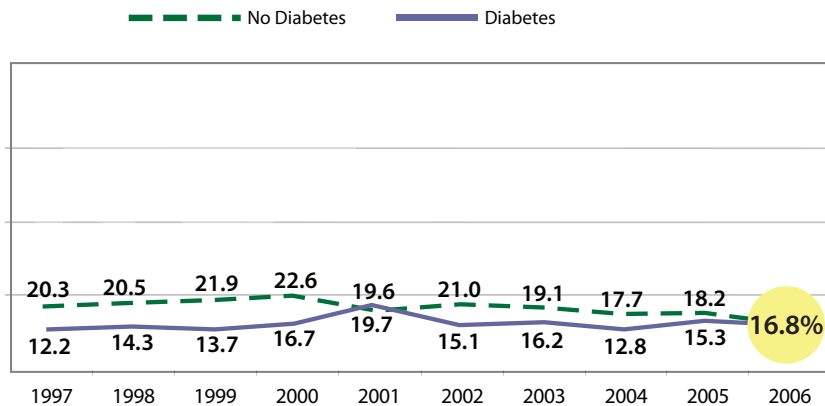


*Deakin T, McShane CE, Cade JE, Williams RDRR. Group based training for self-management strategies in people with type 2 diabetes mellitus (Review). The Cochrane Database of Systematic Reviews 2005, Issue 2.

Do Idaho adults with diabetes smoke as much as people without diabetes?

In 2006, there was no difference in cigarette smoking between Idaho adults with diabetes (16.8%) and those without diabetes (16.8%).

Percentage of Idaho Adults Smoking Cigarettes



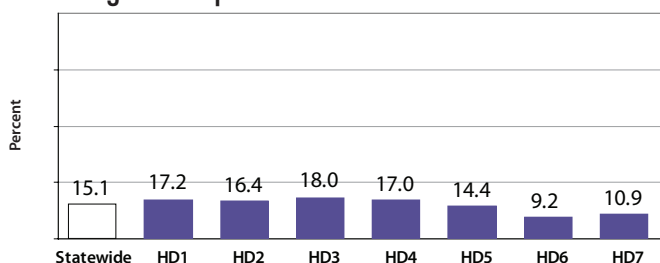
If you're a health care provider:

- Smoking makes it harder for your patients to control their diabetes. People with diabetes who smoke are:
 - 11 times more likely to have a heart attack or stroke than people who don't have diabetes and don't smoke.
 - More likely to have wound healing problems, which can be serious enough to lead to amputations.
 - Increasing their risk of kidney disease.
 - Have a high risk of permanent vision loss or blindness.
- Regular and repeated cessation counseling, offered by multiple health care professionals is very effective at helping people stop smoking. Find out if your patients with diabetes smoke and help them start thinking about quitting today. Call for a free packet from the [Tobacco Prevention and Control Program](#), which includes a guide to using the 5As with your patients who smoke and fax referral forms for smoking cessation classes.
- Local health districts offer free cessation counseling. Other quitting resources and support: Call [1-800-QUIT-NOW](tel:1-800-QUIT-NOW) (1-800-784-8669) or go to www.idaho.quitnet.com.

How is your own Health District doing?

2004-2006 Aggregate

Percentage of People with Diabetes Who Smoke



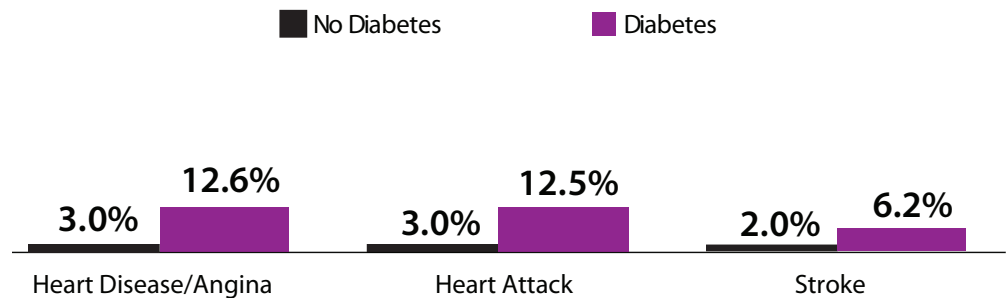
The percentage of Idaho adults with diabetes who smoke is 16.8%—the same percentage as Idaho adults without diabetes.

Are Idaho adults with diabetes at higher risk for heart disease, heart attack and stroke?

All adults with diabetes are significantly more likely to have suffered from heart disease, heart attack, and stroke than adults without diabetes. That's why it's vitally important that people with diabetes manage their ABCs:

- A = A1C. Suggested target: below 7%.*
- B = Blood Pressure. Suggested target: below 130/80.*
- C = Cholesterol. Suggested LDL target: below 100 mg/dl.*

Heart Disease, Heart Attack and Stroke in People With and Without Diabetes



If you're a health care provider:

Poorly managed insulin levels and high blood pressure and cholesterol are risk factors for heart disease. Health care professionals play a vital role in helping people with diabetes control their ABCs. By intervening early, you'll make a significant difference in preventing more serious complications.

People with diabetes are 2-4 times more likely to have heart disease or suffer a stroke than people without diabetes.**

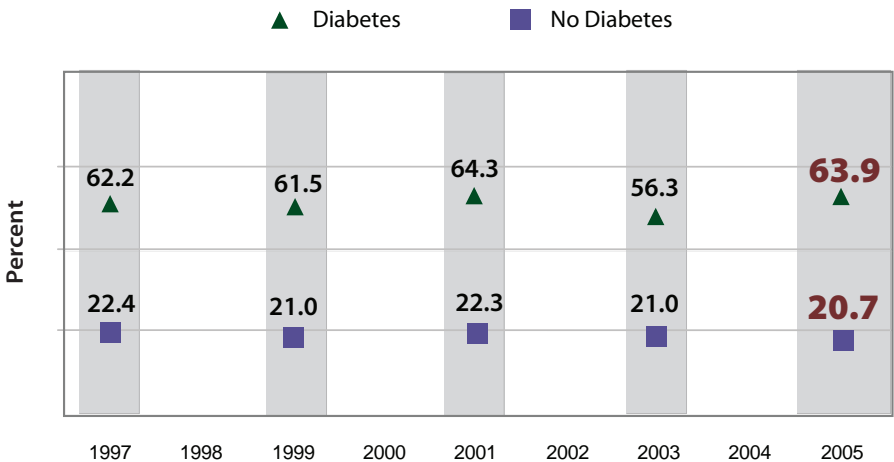
**Redefining diabetes control. Diabetes and Cardiovascular Disease Review. American Diabetes Association/American College of Cardiology. 2002;Issue 1:1-8.

*American Diabetes Association: Clinical Practice Recommendations 2007. *Diabetes Care*. 2007;30(s1):1-104.

Do Idaho adults with diabetes have high blood pressure?

Since 1997, Idaho adults with diabetes were significantly more likely to have been diagnosed with high blood pressure than adults without diabetes.

Percentage of Adults with Diabetes with High Blood Pressure



If you’re a health care provider:

High blood pressure is an extremely common comorbidity of diabetes. Diagnosis and treatment of high blood pressure is critical in preventing cardiovascular disease. All patients with diabetes should have blood pressure measured at the time of diagnosis and at each routine diabetes visit. Patients with diabetes should be treated to a blood pressure goal of less than 130/80.*

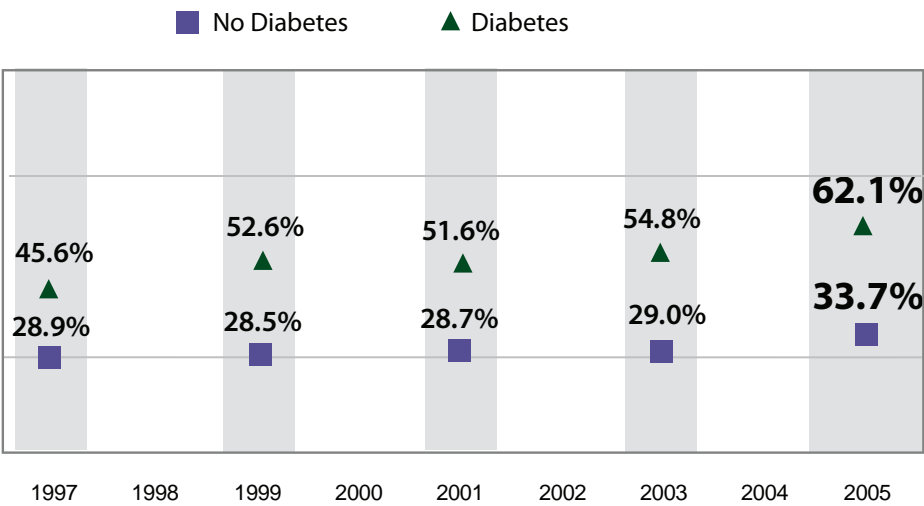
*American Diabetes Association: Clinical Practice Recommendations 2007. *Diabetes Care*. 2007;30(s1):1-104.

Idahoans with diabetes were almost three times as likely to suffer from high blood pressure as Idahoans without diabetes.

Do Idaho adults with diabetes have high cholesterol?

The percent of Idaho adults diagnosed with high cholesterol has been increasing since 1997—and in everyone, whether or not they have diabetes.

Percentage of Adults with Diabetes with High Cholesterol



If you’re a health care provider:

People with diabetes usually have elevated triglycerides and decreased HDL levels, both risk factors for cardiovascular disease. Treatment includes management of high blood pressure and hyperlipidemia, aspirin therapy, use of ACE inhibitors and smoking cessation.*

People with diabetes often report that the most difficult part of managing their disease is figuring out what foods they can eat and how much of them. But many people with diabetes have benefitted from sessions with a registered dietitian or by attending diabetes self-managment classes, where they’ve learned solid strategies for managing their diets, which, in turn can help lower cholesterol levels.

*Hypertension in diabetes. Diabetes and Cardiovascular Disease Review. American Diabetes Association /American College of Cardiology. 2002;Issue 2:1-8.

In 2005, adults with diabetes were almost twice as likely to have been diagnosed with high cholesterol than adults without diabetes.

Are Idaho adults with diabetes suffering from End Stage Renal Disease (ESRD)?

The incidence of End Stage Renal Disease (ESRD) has risen steadily in Idaho since 1980. In 2004, 264 Idahoans were diagnosed with ESRD: 107 of them were people with diabetes. Much of the increase in both incidence and prevalence may be attributed to diabetes. Diabetic nephropathy is the leading cause of ESRD in the U.S.¹ The peak incidence (3%/y) is usually found in persons who have had diabetes for 10-20 years.

Diabetic nephropathy is a clinical syndrome characterized by persistent albuminuria (>300 mg/d or >200 mcg/min) that is confirmed on at least 2 occasions 3-6 months apart, a relentless decline in the glomerular filtration rate (GFR), and elevated arterial blood pressure.²

New cases of End Stage Renal Disease among Idaho adults in 2004:

107 with diabetes - a 41% increase since 1994

147 without diabetes - a 50% increase since 1994

Total number of cases of End Stage Renal Disease among Idaho adults in 2004:

481 with diabetes - a 100% increase since 1994

865 without diabetes - a 73% increase since 1994

If you're a health care provider²

- Help your patients with diabetes to keep their blood glucose as close to normal as possible.
- Work with them to keep their blood pressure below 130/80 to help prevent kidney damage.
- Make sure your patients follow a healthy eating plan. A dietitian can help them get on track.
- Remind your patients to have their kidneys checked at least once a year and their blood tested at least once a year for creatinine.
- Remind your patients to moderate their use of painkillers.
- Tell your patients to make an appointment right away if they have bladder or kidney infections.

1. National Institute of Diabetes and Digestive and Kidney Diseases: *U.S. Renal Data System 2001 Annual Data Report: Atlas of End-Stage Renal Disease in the United States*. Bethesda, MD, National Institutes of Health, 2001.

2. Kidney Disease Outcomes Quality Initiative™ (KDOQI) Clinical Practice Guidelines and Clinical Practice Recommendations for Diabetes and Chronic Kidney Disease. *AJKD*. 2007;49(S2):1-182.

In 2004, **481** people with diabetes in Idaho were living with ESRD—a 100% increase since 1994.

In 2005, kidney disease was the **12th** leading cause of death in Idaho.

A Guide to Diabetes Screenings and Exams¹



A1C Check

Patients should have an A1C test twice a year if they are meeting their treatment goals.

Patients should have an A1C test every 3 months if their treatment changes, such as starting a new medicine, or if they're not meeting blood sugar goals.

Dilated Eye Exam

Patients with type 2 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist shortly after the diagnosis of diabetes.

Subsequent examinations should be repeated annually by an ophthalmologist or optometrist. Less frequent exams can be considered in the case of a normal eye exam. More frequent exams will be needed if retinopathy is progressing.

Foot Exam

Perform a comprehensive foot exam and provide foot self-care education annually on patients with diabetes to identify risk factors. Refer patients who smoke or who have had previous lower-extremity complications to foot care specialists.

Flu Shot

Once a year — for all people with diabetes—even pregnant women. The best time to get a flu shot is between October and mid-November, before the flu season begins.

Pneumonia Shot

Adults with diabetes need at least 1 lifetime pneumococcal vaccination. When patients reach 64, they'll usually need a one-time revaccination.

Dental Exam

Patients with diabetes should be seen every six months.

If you're a health care provider:

At each regular diabetes visit²:

- Measure weight and blood pressure.
- Inspect feet.
- Review self-monitoring blood glucose (SMBG) record.
- Review/adjust medications.
- Recommend regular use of aspirin for CVD prevention.
- Review self-management skills, dietary needs, and physical activity.
- Consider referral for medical nutrition therapy, diabetes self-management education, and psychosocial assessment.
- Counsel on smoking cessation and alcohol use (if needed).

1. American Diabetes Association: Clinical Practice Recommendations 2007. *Diabetes Care*. 2007;30(s1):1-104.

2. National Diabetes Education Program. Numbers at a glance. Available at: <http://ndep.nih.gov/new/NewsNotes/v3n3.htm>. Accessed July 2007.

Diabetes Education Centers in Idaho

Call or visit their web site to find out if they offer a diabetes support group.

Boise

Humphreys Diabetes Center

www.hdiabetescenter.org

208-331-1155

Caldwell

West Valley Medical Center Diabetes Resource Center

www.westvalleymedctr.com (under "Services") 208-455-3813

Coeur d'Alene

Kootenai Medical Center

KMC Diabetes Self-Management Training Program

www.kmc.org (under "Medical Services") 208-666-2036

Driggs

Rocky Mountain Diabetes & Osteoporosis Center

Teton Valley Hospital Diabetes Self-Management Program

208-354-2383

Emmett

Humphreys Diabetes Center

www.hdiabetescenter.org

208-331-1155

Gooding

Gooding County Memorial Hospital

Diabetes Education Program

208-934-9886

Grangeville

Syringa General Hospital

www.syringahospital.org 208-983-1700, extension 588

Idaho Falls

Rocky Mountain Diabetes & Osteoporosis Center

Patient Diabetes Education Program

208-523-1122

Jerome

R & R Pharmacy Diabetes Education Clinic

208-324-3784

St. Benedict's Hospital Diabetes Management Center

208-324-1122

Ketchum

St. Luke's Wood River Medical Center

Diabetes Self-Management Education Program

www.stlukesonline.org/wood_river/classes_and_events

208-727-8356

Lewiston

St. Joseph Regional Medical Center, Outpatient Diabetes Education Program

www.sjrmc.org/diabetes_education.htm

208-799-5227

Meridian

Humphreys Diabetes Center

www.hdiabetescenter.org

208-331-1155

Moscow

Gritman Medical Center

Diabetes Care-Education, Self-Management Program

www.gritman.org/services/diabetic.htm

208-883-6341

Nampa

Mercy Medical Center LifeSkills Diabetes Education Program

www.mercymedicalnampa.com/services/nutrition.html

208-463-5723

Pocatello

Portneuf Diabetes Education Program

www.portmed.org/classes.cfm

208-239-2432

Rexburg

Madison Memorial Hospital

Diabetes Self-Management Education Program

www.madisonhospital.org (under "Hospital Services")

208-359-6524

Sandpoint

Bonner General Hospital

Diabetes Self-Management Education Program

www.bonnergen.org

208-265-1116

Twin Falls

Magic Valley RMC Downtown Campus (outpatient)

www.stlukesonline.org/magic_valley/specialties_and_services/index.php (under "Diabetes Education")

208-737-3012

Weiser

Eastern Idaho Regional Medical Center Wellness Center, Health Promotion and Diabetes Education

208-529-6111